SAMSUNG

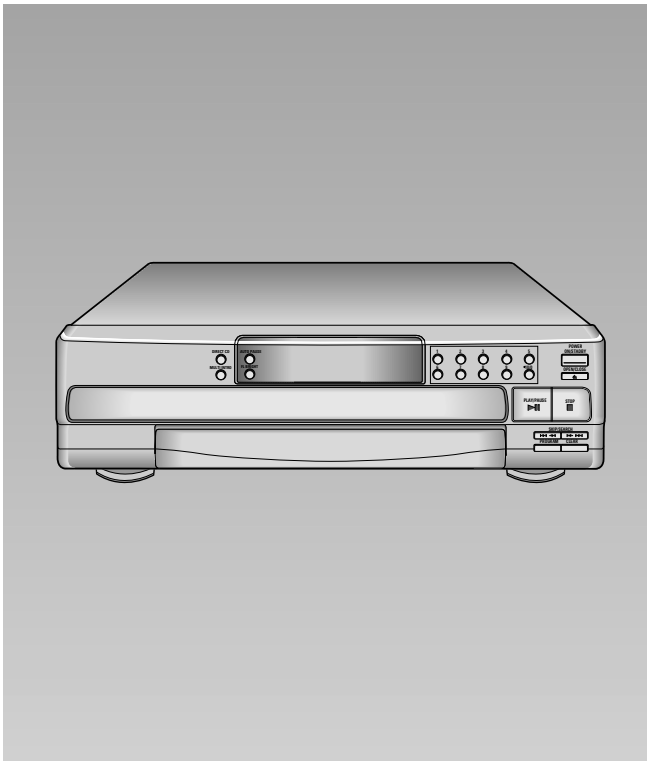
LD/CD PLAYER

DV470

SERVICE Manual

This service manual is based on Model DV530K/DV430(14739-0090-00).
This service manual contains change notes differing from the Model DV530K/DV430.
For the change notes,refer to the “cotents”.

LD/CD PLAYER



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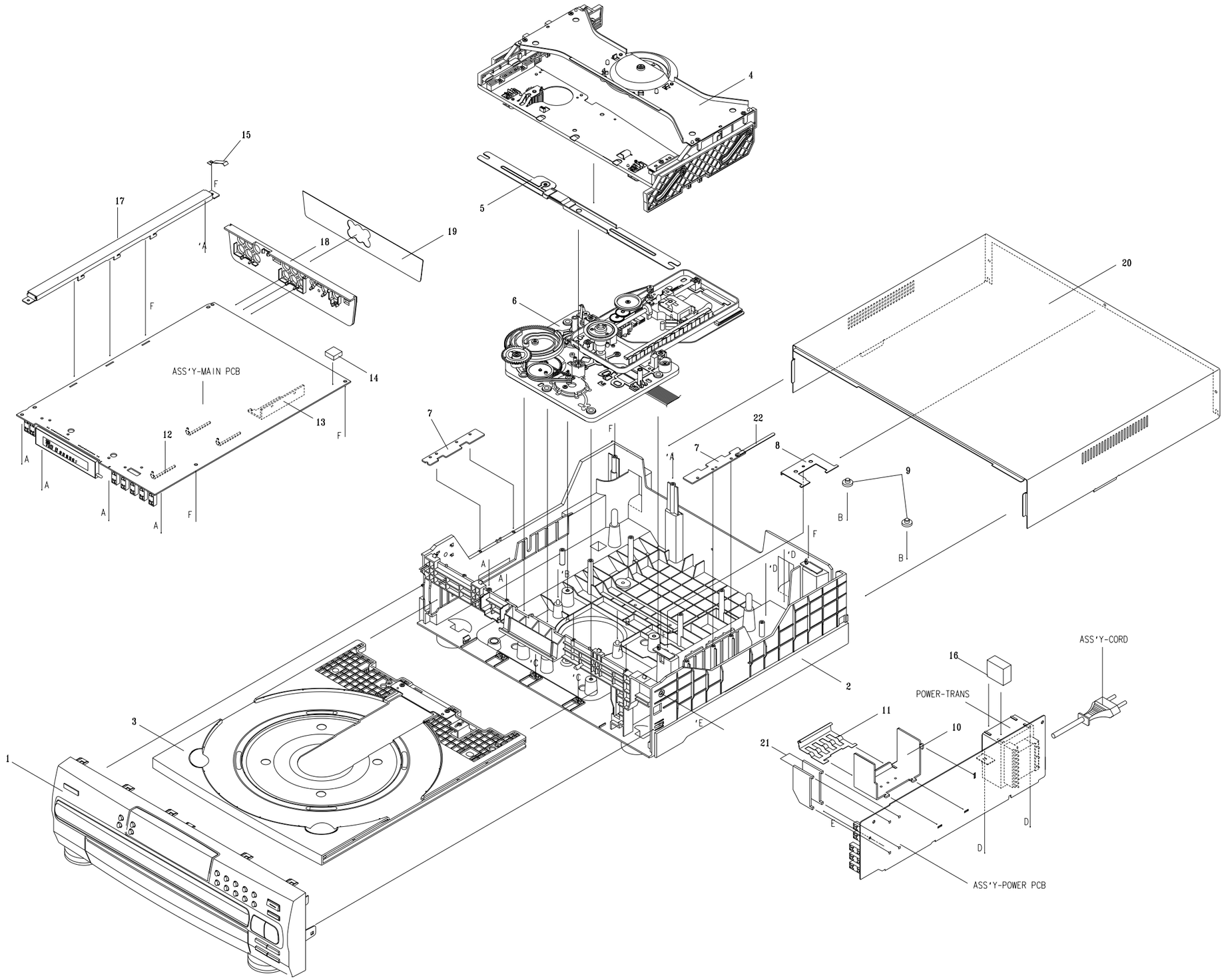
ƒR Design and specficatios are subject to change upon improvement without prior notice.

• Samsung Electronics Co., Ltd. Apr. 1997. Printed in Korea. AH68-20160A

5. Exploded View and Parts List

5-1 Explded View



5-2 Parts List

NO	CODE NO	DESCRIPTION	SPECIPICATION	Q'TY	REMARK
1	AH95-10122U	ASS'Y-CABINET FRONT	DV470/EXP	1	
2	AH95-10137D	ASS'Y-CABINET MAIN	ASS'Y	1	
3	AH95-50070A	ASS'Y-TRAY	DV-530K	1	
4	AH95-50069C	ASS'Y-CLAMPER	CVM-55S	1	
5	AH95-50109A	ASS'Y-BRKT LEVER	ASS'Y	1	
6	*CVM55R/EXP	ASS'Y-DECK	ASS'Y	1	
7	AH61-10244A	BRKT-SIDE	SECC 1.6T	2	
8	AH63-30058A	COVER-WIRE	SECC 1.2T	1	
9	16154-507-910	RUBBER-CHASSIS	HICA 35	2	
10	AH62-30009A	HEAT-SINK	AL 2.0T	1	
11	AH61-10631A	BRKT-IC	SUS 301 0.3T	1	
12	AH65-30013A	CLAMP-CORD	DALA-2	3	
13	AH62-30044B	HEAT-SINK IC	AL A1050 2.0T	1	
14	16804-521-510	CUSHION-DECK	EVA SPONGE	1	
15	AH61-10513A	BRKT-PCB	PBS 2.0T	1	
16	AH69-20024A	CUSHION-PCB	EVA SPONGE	1	
17	AH61-10151A	BRKT-PCB	SECC 1.2T	1	
18	AH63-30056A	COVER-REAR	ABS 94HB BLK	1	
19	AH68-50399A	LABEL-JACK	PVC 0.3T	1	
20	AH64-30240G	CABINET-TOP	SECC 0.75T BLK	1	
21	AH62-30042A	HEAT-SINK	AL 1.0T	2	
22	AH65-30010A	CLAMPER-WIRE	DALB-2	1	

6.Electric Parts List

Loc No	New Parts	Description ; Specification	Ald Parts
		DV470/CHN LD CD PLAYER;DV450E,CHN	
	AH59-10004P	REMOCON;,-,-,-,LDP	19233-0049-01
	AH64-50121A	DOOR-BATTERY;ABS,94HB,-,-,	14043-0126-00
PBD1	0402-000450	DIODE-BRIDGE;PBL403,200V,4.0A,DIP-4	12169-219-330
PBD2	0402-000452	DIODE-BRIDGE;PBP203,200V,2.0A,DIP-4	12169-219-320
PCB	AH41-10127F	PCB-SUB,POWER;DV735K,1L,-,330*247*1.6T	16024-0177-05
PCC1,2,4,5	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,6.5X5M	11417-344-103
PCC3,6,7	2202-000785	C-CERAMIC,MLC-AXIAL;10NF,20%,16V,Y5R,TP,3.5X19,-	11447-910-103
PCC3,6,7	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	61407-117-104
PCE1,2	2401-001633	C-AL;6800UF,20%,25V,GP,-,18X35.5,7.	A1104-0346
PCE10	2401-000303	C-AL;100UF,20%,25V,GP,-,6.3X11,2.5M	61637-505-101
PCE11,12,18	2401-001465	C-AL;47UF,20%,10V,GP,-,5X11,2MM	11608-102-473
PCE13,14	2401-000778	C-AL;220UF,20%,10V,GP,-,6.3X11,2.5M	61637-503-221
PCE16	2401-000475	C-AL;10UF,20%,50V,GP,-,5X11,2MM	61637-208-100
PCE17	2401-001572	C-AL;47UF,20%,50V,GP,-,6.3X11,2.5MM	61637-508-470
PCE19,20	2401-001529	C-AL;47UF,20%,25V,GP,-,5X11,2MM	11608-104-473
PCE19,20	2401-001538	C-AL;47UF,20%,25V,GP,-,6X11,2.5MM	61637-205-470
PCE3,4	2401-001879	C-AL;10000UF,20%,16V,GP,TP,18X35.5M	A1104-0623
PCE5,15,15A	2401-000357	C-AL;100UF,20%,50V,GP,-,8X11.5,3.5M	11608-106-101
PCE5,15,15A	2401-002168	C-AL;100UF,20%,50V,GP,TP,10X12.5,5M	61637-508-101
PCE6,7	2401-000118	C-AL;1000UF,20%,10V,GP,TP,10X12.5,5	A1104-0476
PCE6,7	2401-001881	C-AL;1000UF,20%,10V,GP,TP,10X12MM,5	11608-102-102
PCE8	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,2MM	11608-104-103
PCE9	2401-001969	C-AL;470UF,20%,25V,GP,TP,10X12MM,5M	11608-104-471
PCM11,12,13,14,15,18	2301-000378	C-FILM,PEF;10NF,10%,50V,TP,6X12X3.5,4MM	11505-714-103
PCM11,12,13,14,15,18	2301-000379	C-FILM,PEF;10NF,10%,50V,TP,6X7X3.2MM,5MM	61507-121-470
PCM16,17,19,20,21,16A	2301-000449	C-FILM,PEF;47NF,10%,50V,TP,8X11X4.5MM,5MM	61507-121-550
PCM16,17,19,20,21,16A	2301-000450	C-FILM,PEF;47NF,10%,50V,TP,9.5X12.5X5,6MM	11505-714-473
PCW1	3711-000190	CONNECTOR-HEADER;1WALL,2P,1R,7.92MM,	13349-156-020
PCW1	AH39-10002Y	POWER-CORD;CP2,KLCE-2F,2.15M,5239,VDE	A6006-0293
PCW10	AH39-20019M	LEAD-CONNECTOR ASS'Y;5051,5395,3P,200MM	16439-0124-00
PCW10(PQ4),PQ14,15	0502-000425	TR-POWER;2SD2395-F,NPN,2W,TO-220FN,BK,1	B4052-0087
PCW2	AH39-20018Q	LEAD-CONNECTOR ASS'Y;5264,51088,13P,200MM,	16439-0102-00
PCW6	AH39-20018S	LEAD-CONNECTOR ASS'Y;5264,51088,18P,100MM,	16439-0104-00
PD1,2,3,4	0402-000125	DIODE-RECTIFIER;1N4001,50V,1A,DO-41,TP	62169-201-050
PD5,16,17,18	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,	62169-406-482
PD6,7,8,9,10,11,12,13,14,15	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	A4104-0053
PF1	3601-000290	FUSE-FERRULE;250V,500MA,TIME LAG,GLASS,5X20	14709-241-140
PF1,3,4	3602-000147	FUSE-CLIP;250V,7.5A,30MOHM	13164-101-913
PF3,4	3601-000263	FUSE-FERRULE;250V,3.15A,TIME LAG,GLASS,5X20	14709-241-280
PIC1	1203-000294	IC-POSI.FIXED REG.;7808,TO-220,3P,-,PLASTIC,7.7/8	12109-401-730
PIC2	1203-000122	IC-NEGA.FIXED REG.;7908,TO-220,3P,-,PLASTIC,-7.7/	12119-601-840
PIC3	1203-000276	IC-POSI.FIXED REG.;7805,TO-220,3P,-,PLASTIC,4.8/5	12119-601-770
PIC4,5	1201-000191	IC-OP AMP;4558,DIP,8P,300MIL,DUAL,20V/MV	12119-401-170
PL2	AH29-30001C	FILTER-LINE;12MH-18MH,500UH,	A1151-0025
PLED1	0601-000245	LED;ROUND,RED,3.1MM,650NM	12309-001-450
POWER TRANS	AH26-80007R	TRANS-POWER;EI66X35,220V,50HZ,DV-532KV	A1199-0148
PQ1,9,11	0501-000637	TR-SMALL SIGNAL;2SC1740S,NPN,300MW,SPT,TP,270-	12139-307-170
PQ2,3,12,13	0502-000424	TR-POWER;2SB1566-F,PNP,2W,TO-220FN,BK,1	B4052-0086
PQ5	0501-000398	TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12	A4050-0026
PQ6,8,10,18	0501-000167	TR-SMALL SIGNAL;2SA933,PNP,300MW,TO-92S,TP,270	12149-102-350
PQ7	0503-000119	TR-DARLINGTON;KSD560-Y,NPN,1.5W,TO-220,-,500	A4052-0044
PR10,11	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-472
PR12,14	2001-000527	R-CARBON;22OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-220
PR16,27,28,29,30,31,32,33	2003-000798	R-METAL OXIDE(S);820OHM,5%,1W,AA,TP,3.3X9MM	11048-477-821
PR17	2001-000042	R-CARBON;1KOHM,5%,1/4W,AA,TP,2.4X6.4MM	61018-227-102
PR2	2001-000055	R-CARBON;4.7KOHM,5%,1/4W,AA,TP,2.4X6.4M	11018-277-472

Loc No	New Parts	Description ; Specification	Ald Parts
PR20,21	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-562
PR20,21	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	11018-877-562
PR22,23,24,25	2001-000869	R-CARBON;56OHM,5%,1/8W,AA,TP,1.8X3.2MM	11018-877-560
PR3,16A	2001-000047	R-CARBON;2.2KOHM,5%,1/4W,AA,TP,2.4X6.4M	A1000-0161
PR32A	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-330
PR32A	2001-000666	R-CARBON;33OHM,5%,1/8W,AA,TP,1.8X3.2MM	11018-877-330
PR34,45	2004-000285	R-METAL;12KOHM,1%,1/8W,AA,TP,1.8X3.2MM	A1006-0829
PR35,36	2001-000282	R-CARBON;10KOHM,1%,1/8W,AD,TP,1.8X3.2MM	61048-175-103
PR35,36	2004-000218	R-METAL;10KOHM,1%,1/8W,AA,TP,1.8X3.2MM	A1000-0505
PR39,40	2003-000542	R-METAL OXIDE(S);1OHM,5%,1W,AA,TP,3.3X9MM	11048-477-109
PR4	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-473
PR42,43	2004-001880	R-METAL;4.7KOHM,1%,1/8W,AA,TP,1.8X3.2M	
PR5	2001-000588	R-CARBON;3.3KOHM,5%,1/4W,AA,TP,2.4X6.4M	61048-277-332
PR57	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-151
PR6	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-153
PR60	2003-000554	R-METAL OXIDE(S);2.2OHM,5%,1W,AA,TP,3.3X9MM	11048-477-229
PR61	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-273
PR7,9	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-471
PR8,13,15,37,38,41,44,62	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-102
PSW1,2	3404-000160	SWITCH-TACT;12V,50MA,160GF+-50GF,6.55X7.5X	13559-901-110
PSW3,4,5	3404-000157	SWITCH-TACT;12V,50MA,160GF+-50GF,-,SPST	A3018-0026
PZD1	0403-000379	DIODE-ZENER;UZP12B,12V,11.4-12.6V,1W,DO	12169-403-910
PZD2	0403-000358	DIODE-ZENER;UZ5.6BSB,5.6V,5.46-5.7V,500	12169-404-790
TR	AH62-30042A	HEAT SINK;A1050,-,-,-,WHT,-,DV-730K,-	11124-0049-00
	AH90-10635A	**ASSY-PCB MAIN;DV-700,-**	
AVJ1	3722-000390	JACK-RCA;9P/6C,3.5MM,SN,BLK,#16~22	A3040-0234
DC10,11	2401-001893	C-AL;100UF,20%,16V,-,TP,6.3X7MM,5	61617-404-101
DC100	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,TP,2012,	A1100-0017
DC99A	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	61079-917-000
DL10,VL9,AJW6,8	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM,1/0.5MM,-,-	60509-400-115
EYE	AH59-60001F	MODULE-REMOCON;ORC-638V,38KHZ,-,MESH,-,	A1294-0024
FLT	AH07-20002G	V.F.DISPLAY;SVA-09BS05S,-,-,DVC650	A4153-0110
FLT-1	AH69-20035B	CUSHION-FLT;PE+EVA,T10,-,BLK,DV-530K	13054-0056-03
GC4A	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	61637-204-100
GR11,12,13,14,TR32A,ER20	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-102
JW206	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-152
MC1A,XC4	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	61637-208-229
MC3,MC4A	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5X1	11449-010-104
MC4	2401-000118	C-AL;1000UF,20%,10V,GP,TP,10X12.5,5	A1104-0476
MC5,TC16	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	61637-204-470
MC6,7,10,11,TC23,32,33,25	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012,-	A1100-0011
MC7A,10A,VC34A,SC88,8	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,TP,2012,	A1100-0017
MC8,9,VC14A,25,26,52F,XC79,80	2203-001517	C-CERAMIC,CHIP;15PF,5%,50V,NPO,TP,2012,-	A1100-0037
MD1,2,3,4,5,6,7,VD1,2,3	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO	62169-406-482
MD8	0601-000146	LED;ROUND,GRN,3.1MM,563NM	A4150-0123
MD9	0601-000186	LED;ROUND,ORG,3.1MM,610NM	A4150-0124
MIC2,3	0801-000278	IC-CMOS LOGIC;4094B,SHIFT REGISTER,DIP,16P,3	B4004-0080
ML5B,VL6,GL1A	2701-000159	INDUCTOR-AXIAL;22UH,10%,4.2X9.8MM	12429-311-220
MQ1,6,VQ32	0504-000153	TR-DIGITAL;KSR2102,PNP,200MW,10K-10K,SOT-	62129-101-130
MQ1A	0504-000127	TR-DIGITAL;-,NPN,200MW,10K-10KOHM,SOT-23,	A4060-0028
MQ2.TQ3,4,5,5A,VQ8	0504-000128	TR-DIGITAL;-,NPN,200MW,22K-22KOHM,SOT-23,	62129-301-104
MQ8,SQ17A	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K-22K,SOT-	11139-801-101
MR12A	2001-000938	R-CARBON;68OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-680
MR13,14	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-562
MR13A	2001-000027	R-CARBON;100OHM,5%,1/4W,AA,TP,2.4X6.4MM	61018-227-101
MR20	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	61079-917-472
MR5D	2007-000303	R-CHIP;10KOHM,5%,1/8W,DA,TP,3216	61079-217-103
MX1	2802-000108	RESONATOR-CERAMIC;12MHZ,0.5%,BK,10.0X5.0X10.0MM	14539-503-130

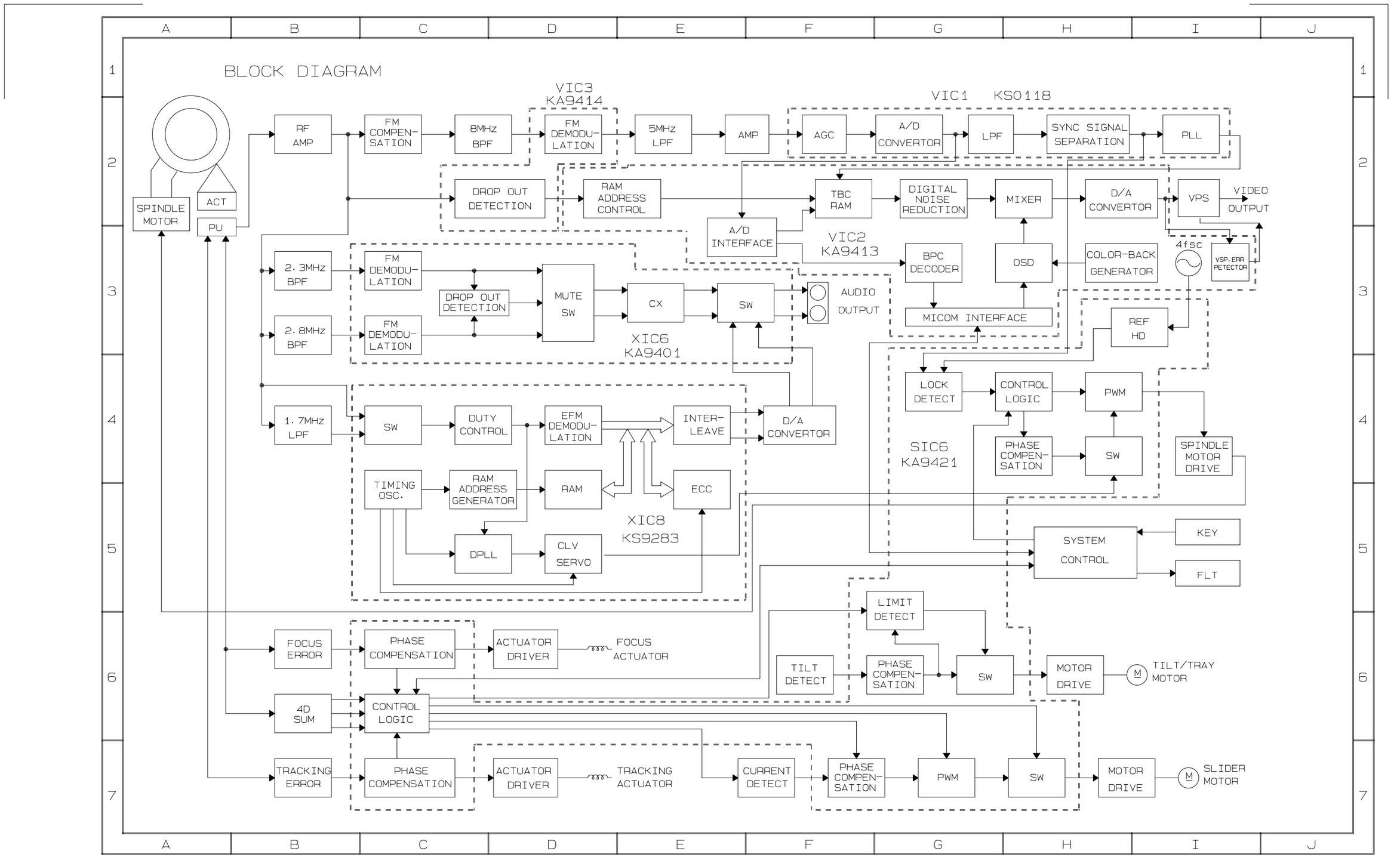
Loc No	New Parts	Description ; Specification	Ald Parts
REC1,VC62A,31A,JC99,95,98	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,TP,2012,	A1100-0017
SC12,13,19,XC38A,76A,TC12A	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	61637-208-479
SC14,16,59,XC37A,VC52C	2203-001164	C-CERAMIC,CHIP;68PF,5%,50V,SL,2012,-,TP	A1100-0664
SC17	2202-000216	C-CERAMIC,MLC-AXIAL;27PF,5%,50V,SL,TP,3.5X19,-	11449-148-270
SC18	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	61407-117-103
SC2,VC74,DC102,104	2401-000907	C-AL;22UF,20%,16V,GP,-,5X11,2MM	61637-204-220
SC22,43,50,51,57,61,UC01A	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,TP,2012,	A1100-0017
SC23,24,XC76B	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP	61637-203-101
SC25,38	2303-000312	C-FILM,PPF;100NF,5%,63V,TP,7.5X12.5X3.5,5	A1102-0164
SC28	2401-000905	C-AL;22UF,20%,16V,BP,-,6X11,2.5MM	61627-204-220
SC29,41,TC4,12	2301-000218	C-FILM,PEF;220NF,5%,50V,TP,-,-	11517-213-224
SC3,44,VC79,DC13,103	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	61637-208-010
SC30	2401-001920	C-AL;2.2UF,20%,50V,BP,TP,5X11MM,5	61627-208-229
SC31	2401-001953	C-AL;4.7UF,20%,50V,BP,BK,6.3X11MM,2	61627-208-479
SC32,XC12	2401-001965	C-AL;470NF,20%,50V,-,BK,4X7MM,1.5MM	61617-408-478
SC34	2401-001967	C-AL;470NF,20%,50V,BP,BK,6X11MM,2MM	61627-208-478
SC35,36,42,TC11,SC37	2401-001905	C-AL;10UF,20%,16V,BP,BK,6X11MM,2.5M	61627-204-100
SC4,6,XC23,24,VC47Y	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	61407-117-104
SC5,20,21,40	2401-001911	C-AL;1UF,20%,50V,BP,BK,6X11MM,2MM	61627-208-010
SC52,XC49,54,59,64,VC50,41,21	2203-001537	C-CERAMIC,CHIP;1NF,10%,50V,X7R,TP,2012,-	A1100-0010
SC53,59A,59B	2203-000295	C-CERAMIC,CHIP;10PF,5%,50V,NPO,2012,-,TP	A1100-0008
SC54,VC17,12,1	2203-001524	C-CERAMIC,CHIP;47PF,5%,50V,NPO,TP,2012,-	A1100-0073
SC55	2203-001105	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,TP,2012,-	A1100-0869
SC58,62,71,72,73,79,80,78	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012,-	A1100-0011
SC60	2203-000787	C-CERAMIC,CHIP;330PF,5%,50V,NPO,TP,2012,-	A1100-0068
SC63,VC10,VC22	2203-000316	C-CERAMIC,CHIP;120PF,5%,50V,NPO,TP,2012,-	A1100-0036
SC65,86,XC53,63	2203-000892	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,TP,2012,-	A1100-0020
SC66,85	2203-001058	C-CERAMIC,CHIP;560PF,5%,50V,NPO,TP,2012,-	61454-139-561
SC67,XC62,73,VC63,8,9	2203-001525	C-CERAMIC,CHIP;56PF,5%,50V,NPO,TP,2012,-	A1100-0004
SC68	2203-000727	C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012,-	A1100-0072
SC69,VC2	2203-000363	C-CERAMIC,CHIP;150PF,5%,50V,NPO,TP,2012,-	A1100-0038
SC7,SC10	2401-001538	C-AL;47UF,20%,25V,GP,-,6X11,2.5MM	61637-205-470
SC70	2203-001036	C-CERAMIC,CHIP;5.6NF,10%,50V,X7R,TP,2012,-	A1100-0075
SC74,XC32,76,35,44	2203-001214	C-CERAMIC,CHIP;8.2NF,10%,50V,X7R,TP,2012,-	A1100-0024
SC76	2203-000374	C-CERAMIC,CHIP;15NF,5%,50V,X7R,2012,-,TP	A1100-0016
SC77,83	2203-000802	C-CERAMIC,CHIP;33NF,10%,50V,X7R,2012,-,TP	A1100-0052
SC81,84,XC31,68,69,78,81	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012,-	A1100-0011
SC87,75,TC26,29	2203-000323	C-CERAMIC,CHIP;12NF,10%,50V,X7R,TP,2012,-	A1100-0130
SC90,XC58,70,71,77,38,VC32	2203-000979	C-CERAMIC,CHIP;47NF,10%,50V,X7R,2012,-,TP	A1100-0135
SC91,82,VC44,SC85A	2203-000495	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,TP,2012,-	A1100-0018
SC91A	2203-000716	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,TP,2012,-	A1100-0050
SCW1	3708-000266	CONNECTOR-FPC/FC/PIC;32P,1.25MM,STRAIGHT,SN	B6013-0069
SD2,LD3,MD52	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO	62169-406-482
SIC2,3,TIC1,3,VIC4,5	1201-000461	IC-OP AMP;4558,SOP,8P,150MIL,DUAL,20V/MV	A4012-0597
SIC4,5	AH14-10004V	IC-DRIVER;LA6510,SIP,	B4008-0683
SL2,4	2701-000123	INDUCTOR-AXIAL;150UH,10%,2.5X3.4MM	12429-211-151
SL3	2701-000134	INDUCTOR-AXIAL;180UH,10%,4.2X9.8MM	12429-311-181
SQ1	0502-000001	TR-POWER;MJE171,PNP,-80V,-60V,-3A,1.	12149-305-100
SQ11,14,15,VQ23,6,16,22,3	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150MW,SOT-23,TP,90-	11139-801-022
SQ2,3,9,10,12,13,13C	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200MW,SOT-23,TP,	11139-801-032
SQ5,6,13A,18,20,14A,31	0504-000128	TR-DIGITAL;-,NPN,200MW,22K-22KOHM,SOT-23,	62129-301-104
SQ7,16,17,MQ3,4,XQ3,4,5	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K-22K,SOT-	11139-801-101
SQ8,TQ2	0504-000128	TR-DIGITAL;-,NPN,200MW,22K-22KOHM,SOT-23,	62129-301-104
SR1	2001-001035	R-CARBON;91OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-910
SR10	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-182
SR100,XR24,23,25,51	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	61079-917-472
SR105,MR2	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012	61079-917-105
SR109,XR108,VR68,109,13	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012	61079-917-122
SR11,12	2001-001096	R-CARBON(S);2.2OHM,5%,1/2W,AA,TP,2.4X6.4MM	11018-377-229

Loc No	New Parts	Description ; Specification	Ald Parts
SR112,115,116,145,170	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	61079-917-273
SR113,130,137,MR7,8	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	61079-917-473
SR117,119,120,144	2007-000395	R-CHIP;150KOHM,5%,1/10W,DA,TP,2012	61079-917-154
SR118,VR124,86,SR133B	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012	61079-917-123
SR121	2007-000338	R-CHIP;120KOHM,5%,1/10W,DA,TP,2012	61079-917-124
SR124,142,146,TR3,33	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	61079-917-104
SR126,TR30	2007-000068	R-CHIP;470KOHM,5%,1/10W,DA,TP,2012	61079-917-474
SR129,134,156,XR123	2007-000565	R-CHIP;220KOHM,5%,1/10W,DA,TP,2012	61079-917-224
SR13	2001-001000	R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-823
SR133	2007-000565	R-CHIP;220KOHM,5%,1/10W,DA,TP,2012	61079-917-224
SR135	2007-000804	R-CHIP;36KOHM,5%,1/10W,DA,TP,2012	61079-917-363
SR138,107,8A,58,56,160	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012	61079-917-332
SR141,VR68B,68A,MR5E,VR109A	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012	61079-917-562
SR147,,157,TR21	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012	61079-917-563
SR15,19,VR142A	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-222
SR152,79,TR9,VR6,TR20	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	61079-917-682
SR159	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	61079-917-331
SR163,TR2,VR75,8,76	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	61079-917-223
SR17	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-221
SR18,148A	2007-000001	R-CHIP;68KOHM,5%,1/10W,DA,TP,2012	61079-917-683
SR2,5,MR6,JW242A	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-103
SR20	2001-000319	R-CARBON;120KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-124
SR21,22	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-682
SR30,34	2007-001195	R-CHIP;820KOHM,5%,1/10W,DA,TP,2012	61079-917-824
SR31,33	11119-101-394	R-CHIP;SCR2012S 390K-J	
SR32,36,MR4,5,VRC	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	61079-917-103
SR3C,VR27	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	61079-917-271
SR41,50,51,52,53,54,64	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	61079-917-103
SR45,83,161,XR16,12,20,15	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	61079-917-101
SR48,106,108,TR40,42,22	2007-000001	R-CHIP;68KOHM,5%,1/10W,DA,TP,2012	61079-917-683
SR55	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	61079-917-153
SR57,MR4A,VR4,92,87,101	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	61079-917-221
SR59,XR91,VR2	2007-001118	R-CHIP;680OHM,5%,1/10W,DA,TP,2012	61079-917-681
SR6	2001-000020	R-CARBON(S);22OHM,5%,1/2W,AA,TP,2.4X6.4MM	11018-377-220
SR60,89,111,132,MR9,10,11	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	61079-917-222
SR61,77,8B,XR109,17,19,VR54,55	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	61079-917-471
SR62,69,70,98,101,155,110	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	61079-917-223
SR62A	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	61079-917-471
SR63,66A,VR99B,103,VRA	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	61079-917-102
SR65	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	61079-917-682
SR67,72,73,103	2007-000308	R-CHIP;10OHM,5%,1/10W,DA,TP,2012	61079-917-100
SR68,74,76,154,TR26	2007-000457	R-CHIP;18KOHM,5%,1/10W,DA,TP,2012	61079-917-183
SR71,84,139	2007-000830	R-CHIP;39KOHM,5%,1/10W,DA,TP,2012	61079-917-393
SR75,151,XR87	2007-001208	R-CHIP;82KOHM,5%,1/10W,DA,TP,2012	61079-917-823
SR78,96,148,90A,TR13	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	61079-917-333
SR8,XR4	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-473
SR80	2007-000671	R-CHIP;2KOHM,5%,1/10W,DA,TP,2012	61079-917-202
SR81,VR41,37,44,42,43	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	61079-917-331
SR82,140,VR30,91,89,SR44	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	61079-917-272
SR85,114,131,168,169,TR4,VR60	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	61079-917-153
SR86,88,VR82,18	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	61079-917-182
SR87	2007-000798	R-CHIP;360OHM,5%,1/10W,DA,TP,2012	61079-917-361
SR8D,66,122,127,125,166	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	61079-917-102
SR8F,95,102,123,136,158	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	61079-917-103
SR8Y	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-392
SR9	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-332
SR90,XR84,30,26,SR57Z	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012	61079-917-152
SR91,164	2007-000703	R-CHIP;3.6KOHM,5%,1/10W,DA,TP,2012	61079-917-362
SR93,VR16	2007-001155	R-CHIP;750OHM,5%,1/10W,DA,TP,2012	61079-917-751

Loc No	New Parts	Description ; Specification	Ald Parts
SR94,XR111,MR12B	2007-000947	R-CHIP;47OHM,5%,1/10W,DA,TP,2012	61079-917-470
SVR1	2103-000290	VR-SEMI;20KOHM,30%,1/10W,TOP	11249-102-044
SVR2	2103-000492	VR-SEMI;5KOHM,30%,1/10W,TOP	11249-102-024
SVR3	2103-000213	VR-SEMI;1KOHM,30%,1/10W,TOP	B1054-0226
SVR4,5,6	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP	B1054-0227
SVR7	2103-000435	VR-SEMI;500OHM,30%,1/10W,TOP	11249-102-014
SW1,2,3,4,5,6,7	3404-000157	SWITCH-TACT;12V,50MA,160GF+-50GF,-,SPST	A3018-0026
SZD1	0403-000344	DIODE-ZENER;UZ3.9B,3.9V,3.7-4.1V,500MW,	12169-403-490
TAP2	AH61-40022B	PIN-TAP-STUD;SPC1,T0.5,BT2,-,	13124-100-711
TC2,7,15,SC12A,VC86,67,68	2401-001895	C-AL;100UF,20%,16V,GP,BK,6.3X11MM,2	61637-504-101
TC20,21,30	2203-000953	C-CERAMIC,CHIP;470PF,5%,50V,NPO,TP,2012,-	A1100-0113
TC24	2203-001135	C-CERAMIC,CHIP;680PF,5%,50V,SL,TP,2012,-	A1100-0739
TC3	2301-000404	C-FILM,PEF;2.2NF,10%,50V,TP,5.5X7X3.2MM,5	61507-121-390
TC31,VC40	2203-001137	C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V,TP,2012,-	11129-004-683
TC35,SC9	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012,-	A1100-0011
TC5,10	2301-000389	C-FILM,PEF;150NF,5%,50V,TP,12.5X15X7.5,7M	11505-713-154
TC8	2301-000458	C-FILM,PEF;56NF,5%,50V,TP,8X12X4.5MM,5MM	61507-121-441
TCW1	3711-000736	CONNECTOR-HEADER;BOX,18P,1R,2.5MM,BLACK	A6010-0753
TCW2	3711-000678	CONNECTOR-HEADER;BOX,13P,1R,2.5MM,	13349-103-130
TIC2	AH14-10001R	IC-PHASE COMP;TC5081AP,SIP,	12119-101-520
TQ1,39	0505-000191	FET-SILICON;2SK184Y,N,-,-,-,200MW,TO-92	12139-601-120
TR1,34,18,XR79,86,101,56,SR99	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	61079-917-473
TR15	2007-000635	R-CHIP;270KOHM,5%,1/10W,DA,TP,2012	61079-917-274
TR16,31,XR82,94,TR6,VR73,7	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	61079-917-153
TR17,24,SR133A,VR19,TR29	2007-000830	R-CHIP;39KOHM,5%,1/10W,DA,TP,2012	61079-917-393
TR23,27,35,XR34A,VR57	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	61079-917-103
TR25	2001-000527	R-CARBON;22OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-220
TR28	2001-000702	R-CARBON;39KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-393
TR31A,XR53,70,67,68	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	61079-917-000
TR7,8,SR143	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	61079-917-273
VC13,16	2203-001646	C-CERAMIC,CHIP;3PF,0.5PF,50V,NPO,TP,2012,2MM	A1100-0089
VC14,SC85	2203-001525	C-CERAMIC,CHIP;56PF,5%,50V,NPO,TP,2012,-	A1100-0004
VC15,7,SC6Z	2203-000818	C-CERAMIC,CHIP;33PF,5%,50V,NPO,TP,2012,-	A1100-0067
VC24,11,53,43,49,47,46,51,31	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012,-	A1100-0011
VC3	2203-001246	C-CERAMIC,CHIP;82PF,5%,50V,NPO,TP,2012,-	A1100-0080
VC30,35,18,19,20,XC78A	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012,-	A1100-0011
VC38,45	2203-000335	C-CERAMIC,CHIP;12PF,5%,50V,NPO,TP,2012,-	A1100-0086
VC4	2203-000661	C-CERAMIC,CHIP;270PF,5%,50V,NPO,2012,-,TP	A1100-0065
VC47Z	2203-000408	C-CERAMIC,CHIP;180PF,5%,50V,NPO,TP,2012,-	A1100-0041
VC5	2203-000840	C-CERAMIC,CHIP;390PF,5%,50V,NPO,TP,2012,-	A1100-0071
VC57,DC15,100,101,104A	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,TP,2012,	A1100-0017
VC6,52A,52B,52	2203-001611	C-CERAMIC,CHIP;22PF,5%,50V,NPO,TP,2012,2MM	A1100-0061
VC65A	2401-001893	C-AL;100UF,20%,16V,-,TP,6.3X7MM,5	61617-404-101
VC68Z	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP,3.5X1.9,-	A1100-0505
VC69,72	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	61617-404-100
VC70,71,70A,66	2401-000778	C-AL;220UF,20%,10V,GP,-,6.3X11,2.5M	61637-503-221
VC7A	2203-000749	C-CERAMIC,CHIP;30PF,5%,50V,NPO,TP,2012,-	A1100-0048
VC80,73,65,95,98,99,SC33	2401-001895	C-AL;100UF,20%,16V,GP,BK,6.3X11MM,2	61637-504-101
VC80A,SC39,VC34A	2203-000609	C-CERAMIC,CHIP;22NF,10%,50V,X7R,TP,2012,-	A1100-0044
VC81,82,78,90,91,75,76,77	2401-001895	C-AL;100UF,20%,16V,GP,BK,6.3X11MM,2	61637-504-101
VC89	2401-001891	C-AL;100UF,20%,10V,BP,TP,6X11MM,5MM	11608-202-101
VCTC1	2502-000127	C-CERAMIC TRIMMER;20-4.6PF,+50-0%,100V	11829-512-030
VIC1	1205-000528	IC-GENERATOR;KS0118,QFP,80P,-,PLASTIC,7V,-,	A4012-0208
VIC3	1204-000242	IC-VSP;KA9414D,SOP,30P,-,PLASTIC,6V,-	A4012-0380
VL1	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	62427-010-330
VL10,14,ML1A,SL1	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM	12429-411-100
VL11	2701-000111	INDUCTOR-AXIAL;100UH,10%,2.5X3.4MM	12429-411-101
VL12,5	2701-000166	INDUCTOR-AXIAL;3.3UH,10%,2.5X3.4MM	12429-211-339
VL13,13A,13B	2701-000159	INDUCTOR-AXIAL;22UH,10%,4.2X9.8MM	12429-311-220
VL13Z	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM	12429-411-100
VL2,3,4	2701-000120	INDUCTOR-AXIAL;12UH,10%,2.5X3.4MM	12429-211-120

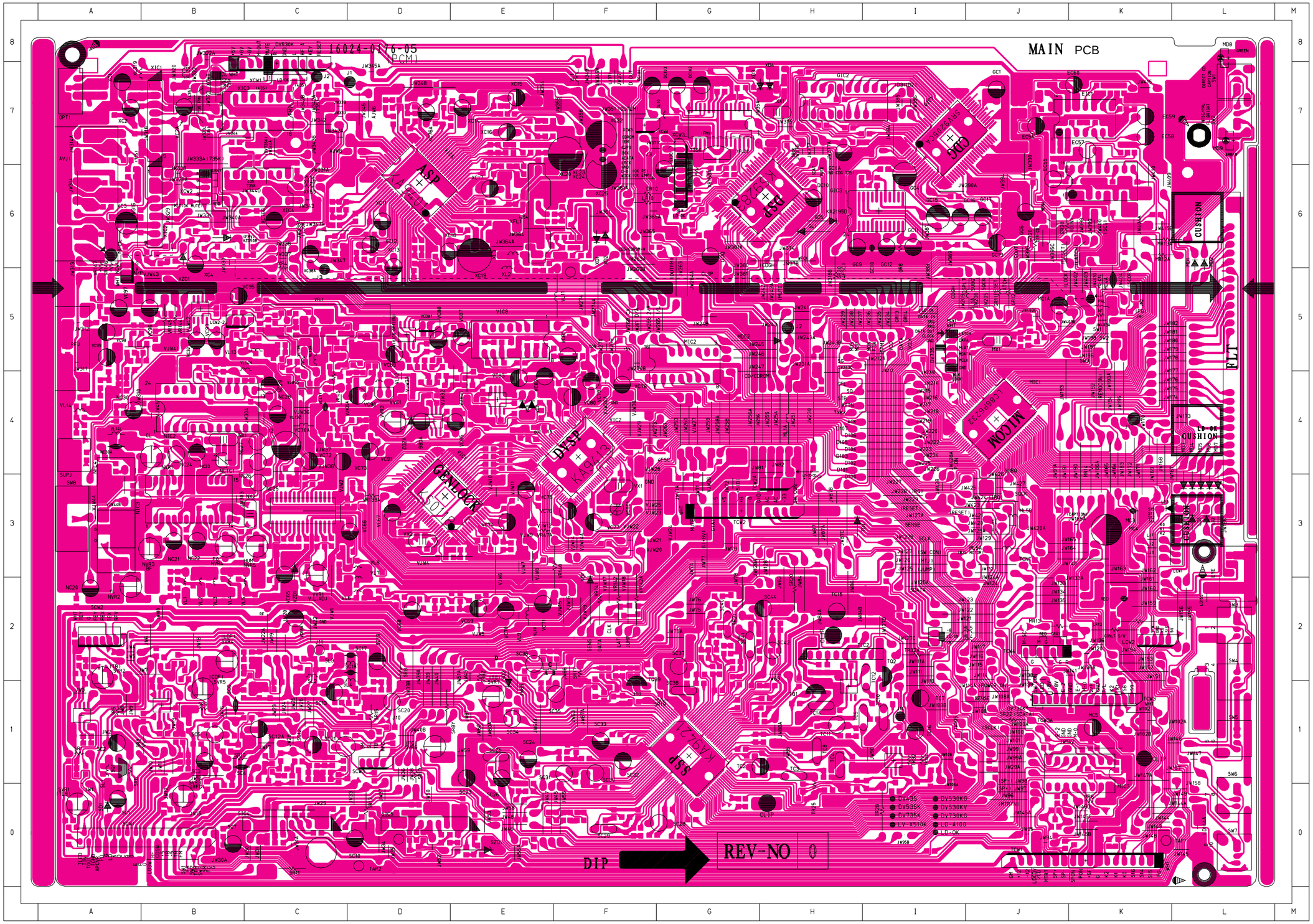
Loc No	New Parts	Description ; Specification	Ald Parts
VQ10A,11	0504-000129	TR-DIGITAL;KSR1104,NPN,200MW,47K-47K,SOT-	62129-101-173
VQ13,27,14,15,12,26,7,2	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200MW,SOT-23,TP,	11139-801-032
VQ17,20,21,10,4,25	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150MW,SOT-23,TP,90-	11139-801-022
VQ18,XQ1,2,SQ19,13B,VQB	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200MW,SOT-23,TP,	11139-801-032
VQ24	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150MW,SOT-23,TP,90-	11139-801-022
VQ5	0504-000158	TR-DIGITAL;KSR2104,PNP,200MW,47K-47K,SOT-	11139-801-060
VQA	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200MW,SOT-23,TP,	11139-801-032
VR102,97,96,95,80,133	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	61079-917-000
VR105,14	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	61079-917-222
VR107,VJW34,BC1,2,JC29A	2007-000033	R-CHIP;0OHM,5%,1/8W,DA,TP,3216	61079-217-000
VR11,83,81,93,SR46,149	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	61079-917-102
VR110	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012	61079-917-122
VR123	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012	61079-917-750
VR126,102A	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	61079-917-102
VR12A,61,52,139,9,26,24	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	61079-917-000
VR135,XR76,62,VR15	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	61079-917-392
VR139A,JW400	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-102
VR140	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	61048-177-472
VR143,141,142,TR32,VR47A	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-102
VR144	2001-000552	R-CARBON;270OHM,5%,1/4W,AA,TP,2.4X6.4MM	61048-277-270
VR145	2001-000118	R-CARBON(S);180OHM,5%,1/2W,AA,TP,2.4X6.4MM	11018-377-181
VR147,146	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-750
VR17,25,127,XR106,13,22,104,10	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	61079-917-102
VR32	2007-000511	R-CHIP;2.4KOHM,5%,1/10W,DA,TP,2012	61079-917-242
VR35,50,XR43	2007-001201	R-CHIP;820OHM,5%,1/10W,DA,TP,2012	61079-917-821
VR36,65,63,46,10	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	61079-917-222
VR36A,XR21,11,VR37	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	61079-917-104
VR39,38,79,40	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	61079-917-331
VR47,34A,138,49A,99A	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	61079-917-000
VR49	2007-000225	R-CHIP;1.2MOHM,5%,1/10W,DA,TP,2012	A1020-0302
VR49B,SR92,90B	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	61079-917-222
VR5,3,74A	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	61079-917-101
VR51	2007-000401	R-CHIP;150OHM,5%,1/10W,DA,TP,2012	61079-917-151
VR59,20,77,XR100	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012	61079-917-152
VR62	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012	61079-917-563
VR71,1,33,78,SR8E	2007-000030	R-CHIP;560OHM,5%,1/10W,DA,TP,2012	61079-917-561
VR74,70,29,84,66,64,56	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	61079-917-102
VR86Z,86Y,99,104,99D,99C	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	61079-917-000
VR88	2007-000449	R-CHIP;180OHM,5%,1/10W,DA,TP,2012	61079-917-181
VR94,132,90,34	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	61079-917-471
VR98,45,21,SR47	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012	61079-917-332
VVC1	0405-000140	DIODE-VARACTOR;SVC321SP,-15V,-100NA,TO-92S	12169-501-230
VVR1,VVR2	2103-000461	VR-SEMI;50KOHM,30%,1/10W,TOP	11249-102-064
VX1	2801-001420	CRYSTAL-UNIT;14.31818MHZ,30PPM,28-AAM,12PF,	A1280-0248
VX2	2801-001427	CRYSTAL-UNIT;24.576MHZ,50PPM,28-AAM,16PF,25	A1280-0252
VZD2,VZD1	0403-000342	DIODE-ZENER;UZ3.6BSA,3.6V,3.47-3.68V,50	12169-404-770
XC1,2A,VC96,97,XC25	2401-001355	C-AL;470UF,20%,10V,GP,-,8X11.5,5MM	61637-503-471
XC11,14,15,17,18,2,3	2401-000907	C-AL;22UF,20%,16V,GP,-,5X11,2MM	61637-204-220
XC13,16,SC26,VC83,87,88,93,85	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	61637-204-100
XC19,20,22	2401-000795	C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M	61637-504-221
XC37,45	2203-001230	C-CERAMIC,CHIP;820PF,5%,50V,NPO,2012,-,TP	A1100-0081
XC50,51,VC84,33,34,42	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,TP,2012,	A1100-0017
XC52	2203-000533	C-CERAMIC,CHIP;2.7NF,10%,50V,X7R,TP,2012,-	A1100-0047
XC55	2203-000555	C-CERAMIC,CHIP;20PF,5%,50V,NPO,TP,2012,-	A1100-0043
XC56,VC36,48	2203-000429	C-CERAMIC,CHIP;18PF,5%,50V,NPO,2012,-,TP	A1100-0059
XC57,60,72,75,VC27	2203-000595	C-CERAMIC,CHIP;220PF,5%,50V,NPO,TP,2012,-	A1100-0062
XC61,74,VC28,29	2203-001551	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,TP,2012,2MM	A1100-0015
XC65	2203-000341	C-CERAMIC,CHIP;130PF,5%,50V,NPO,TP,2012,-	A1100-0097
XC66,SC6A	2203-000858	C-CERAMIC,CHIP;39PF,5%,50V,NPO,2012,-,TP	A1100-0053
XC67,SC15,VC51A,MC10A	2203-000239	C-CERAMIC,CHIP;100PF,5%,50V,NPO,TP,2012,-	A1100-0009

Loc No	New Parts	Description ; Specification	Ald Parts
XCD3,4	0405-000135	DIODE-VARACTOR;HVU202A,34V,-,URP,TP	B4108-0014
XD1,2,5,GL1,TD1	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO	62169-406-482
XFL1	2909-000157	FILTER-LC;2.3/2.81MHZ,+-50KHZ,3DB,3DB+-0	A1240-0115
XIC1,2	1201-000192	IC-OP AMP;4558,SIP,9P,-,DUAL,20V/MV,PLAS	12119-401-630
XIC6	1204-000109	IC-ASP;KA9401,QFP,80P,-,PLASTIC,6V,-,	A4012-0211
XIC8	0904-000158	IC-DSP;9283,-,QFP,80P,-,16.9344MHZ,-,	A4012-0292
XIC9	1002-000169	IC-D/A CONVERTER;PCM1710U,16BIT,SOP,28P,-,-,ST,	B4012-0381
XL2,VL7	2701-000195	INDUCTOR-AXIAL;47UH,5%,2.4X3.4MM	62427-010-293
XL3,ML4,5,VL8	2701-000205	INDUCTOR-AXIAL;56UH,10%,2.5X3.4MM	12429-211-560
XQ6,10,11,VQ1,19,9	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200MW,SOT-23,TP,	11139-801-032
XR102,103,VR69,136,XR75	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	61079-917-472
XR110	2007-001216	R-CHIP;82OHM,5%,1/10W,DA,TP,2012	61079-917-820
XR113,114,TR40A,MR5A,5B	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	61079-917-102
XR14,VR12,67,72,SR153	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	61079-917-472
XR150A	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-271
XR21A,MR15	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	61079-917-103
XR28,51A,VR58,85,TR31B	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	61079-917-103
XR29,57,95,134,32	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	61079-917-223
XR31,36A	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	61079-917-223
XR47,50	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-821
XR49,121,VR31,XR122	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012	61079-917-332
XR61,80,99,112,134A	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	61079-917-222
XR63,71	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	61079-917-911
XR77,73,54,VR53,JM2	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	61079-917-000
XR81,85,92,96,107,60,69	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	61079-917-682
XR83,98,115,116	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	61079-917-104
XR88,89,SR43	2007-000395	R-CHIP;150KOHM,5%,1/10W,DA,TP,2012	61079-917-154
XR90,36,VR22B,JC730K	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	61079-917-333
XR97,93,TR10,41,MR5C	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	61079-917-273
XX1	2801-001423	CRYSTAL-UNIT;16.9344MHZ,17PPM,28-AAM,18PF,2	A1280-0249
XZD1,SD1	0403-000354	DIODE-ZENER;UZ5.1B,5.1V,4.8-5.4V,500MW,	12169-403-310
	AH90-40195B	**ASSY-OPT PCB;DV535K,EXP,MICOM**	
JC7E	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	61079-917-000
MIC1	AH13-30005E	IC-MCU;-,LC866232A-5873,-,QFP,DV535K/	B4002-0716
SIC6	1204-000218	IC-SSP;KA9421,QFP,100P,-,PLASTIC,6V,-	A4012-0210
VIC2	1204-000241	IC-VSP;KA9413,QFP,100P,-,PLASTIC,6V,-	A4012-0379
	AH91-40059B	ASSY-OPTION;DV530KN,-,	19129-0385-2M
NT	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	61048-177-103
	AJ59-20007L	DECK-LDP;CVM55REXP,-,-,-,	*CVM55REXP


BLOCK DIAGRAM
VIC3
KA9414
VIC1 KS0118
SPINDLE MOTOR
ACT
PU
RF AMP
FM COMPEN-SATION
8MHz BPF
FM DEMODU-LATION
5MHz LPF
AMP
AGC
A/D CONVERTOR
LPF
SYNC SIGNAL SEPARATION
PLL
DROP OUT DETECTION
RAM ADDRESS CONTROL
TBC RAM
DIGITAL NOISE REDUCTION
MIXER
D/A CONVERTOR
VPS
VIDEO OUTPUT
A/D INTERFACE
VIC2
KA9413
BPC DECODER
OSD
COLOR-BACK GENERATOR
4fsc
VSP. ERR PETECTOR
2.3MHz BPF
2.8MHz BPF
FM DEMODU-LATION
DROP OUT DETECTION
MUTE SW
CX
SW
AUDIO OUTPUT
MICOM INTERFACE
REF HD
XIC6
KA9401
LOCK DETECT
CONTROL LOGIC
PWM
SIC6
KA9421
PHASE COMPEN-SATION
SW
SPINDLE MOTOR DRIVE
1.7MHz LPF
SW
DUTY CONTROL
EFM DEMODU-LATION
INTER-LEAVE
D/A CONVERTOR
TIMING OSC.
RAM ADDRESS GENERATOR
RAM
ECC
XIC8
KS9283
DPLL
CLV SERVO
SYSTEM CONTROL
KEY
FLT
LIMIT DETECT
FOCUS ERROR
PHASE COMPENSATION
ACTUATOR DRIVER
FOCUS ACTUATOR
TILT DETECT
PHASE COMPEN-SATION
SW
MOTOR DRIVE
TILT/TRAY MOTOR
4D SUM
CONTROL LOGIC
TRACKING ERROR
PHASE COMPENSATION
ACTUATOR DRIVER
TRACKING ACTUATOR
CURRENT DETECT
PHASE COMPEN-SATION
PWM
SW
MOTOR DRIVE
SLIDER MOTOR

4. PCB Diagram

4-1 MAIN



*** DIODE ***

GL1 (H6)
LD2 (L3)
LD3 (K3)
MD1 (L6)
MD2 (L6)
MD3 (L3)
MD4 (L3)
MD5 (L3)
MD52 (H5)
MD6 (L3)
MD7 (L3)
SD1 (A0)
SD2 (E1)
SZD1 (E0)
TD1 (H3)
VD1 (F3)
VD2 (E4)
VD3 (E4)
VZD1 (C3)
VZD2 (D4)
XD1 (F6)
XD2 (F6)
XD3 (H7)
XD4 (H7)
XD5 (H6)
XZD1 (B6)
XZD50B (B6)

*** TR ***

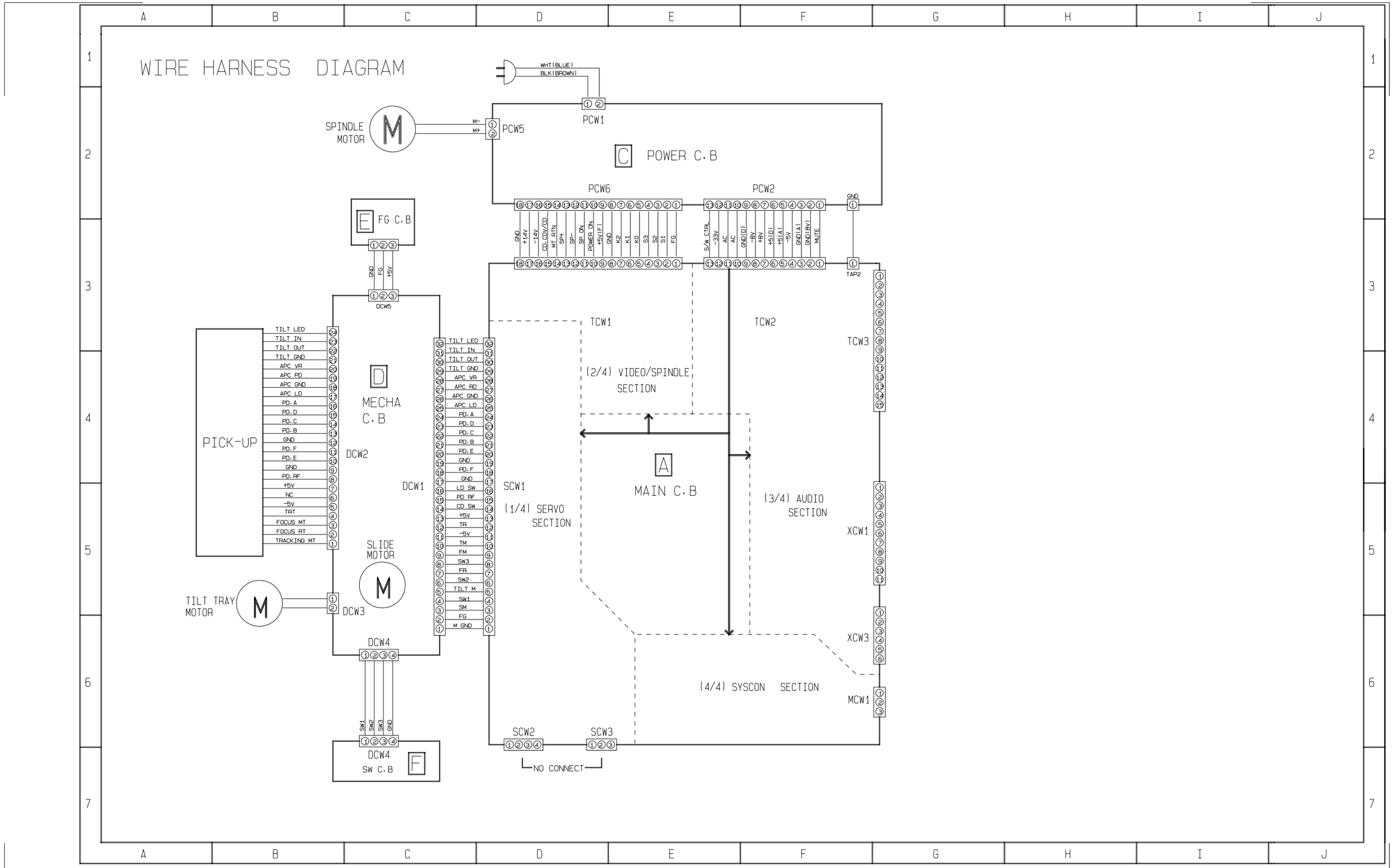
SQ1 (A1)
TQ1 (H1)
TQ2 (I2)
TQ39 (F1)

*** IC&WAFER ***

EIC1 (J7)
LCW2 (K2)
LCW2-2 (B5)
MCW1 (I5)
MIC2 (F4)
MIC3 (K1)
NCW1 (A5)
SCW2 (A2)
SCW3 (D1)
SIC4 (C0)
SIC5 (D0)
TCW1 (K0)
TCW2 (G3)
TCW2A (H3)
TCW3 (K1)
TCW4 (J2)
XCW0 (B7)
XCW1 (C7)
XCW2 (B6)
XCW3 (G6)
XCWA (F7)
XIC1 (B7)
XIC2 (B6)
XIC3 (C7)
XIC4 (C6)

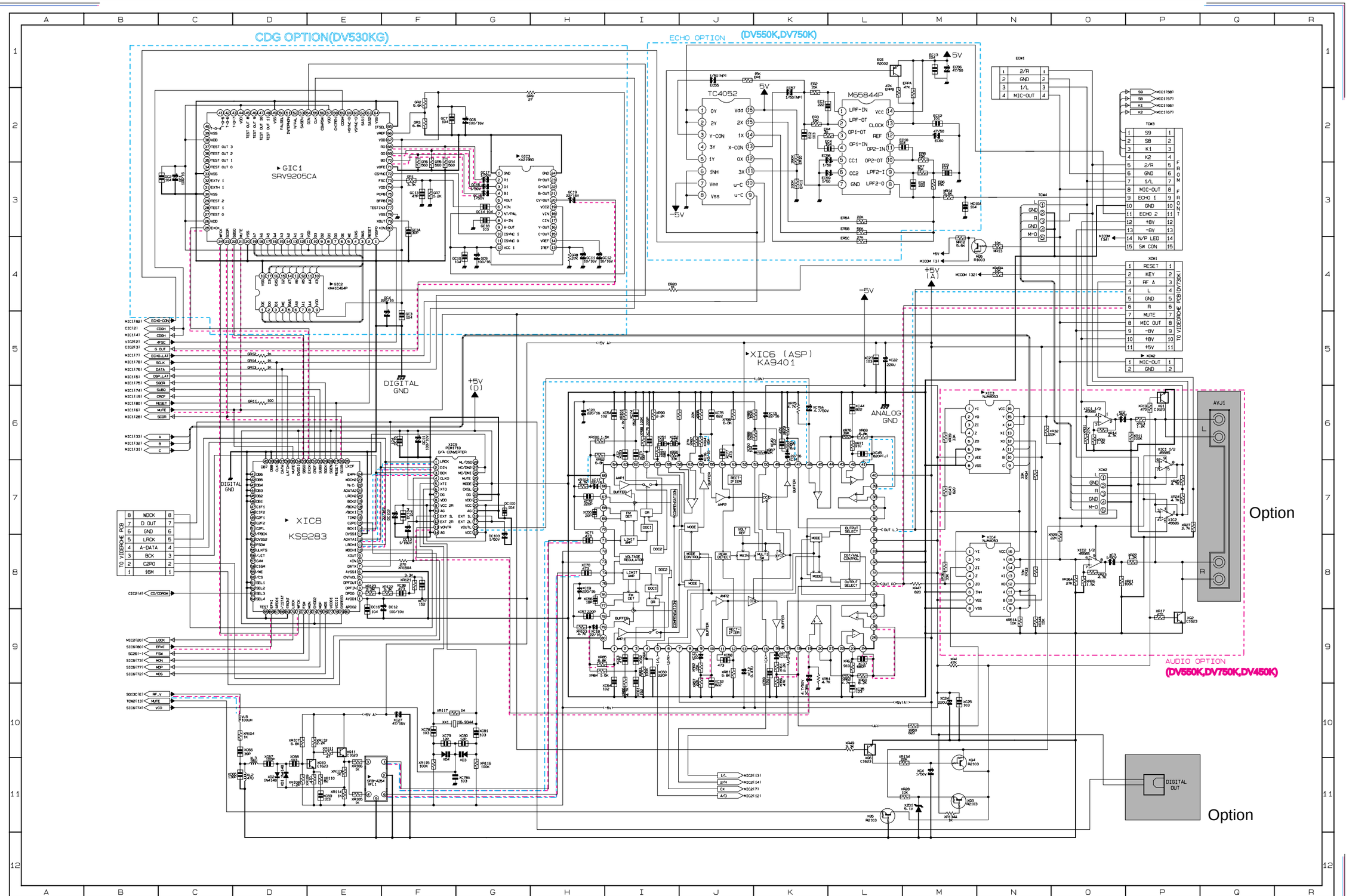
1. Wiring Diagram

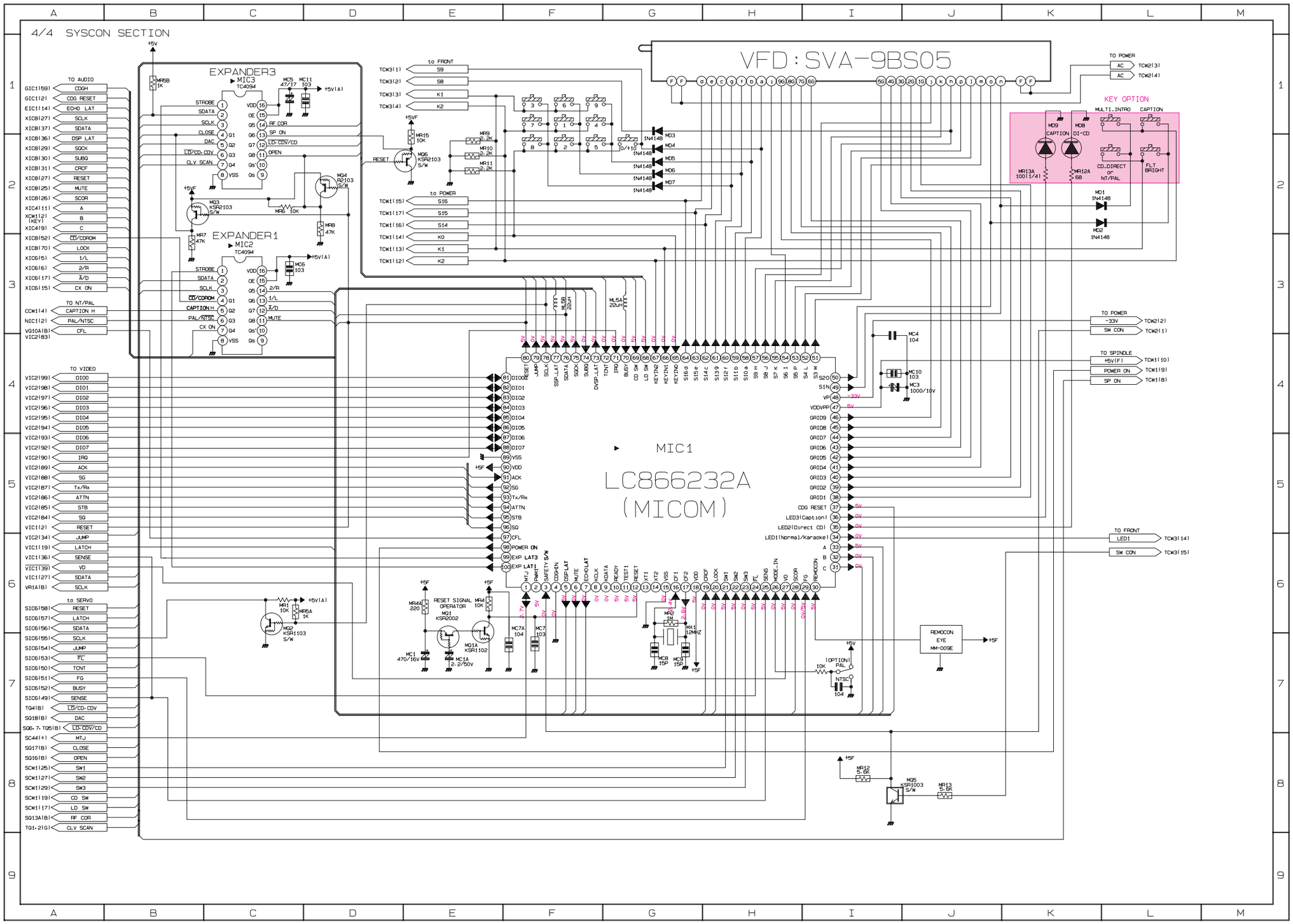
1-1 DV470

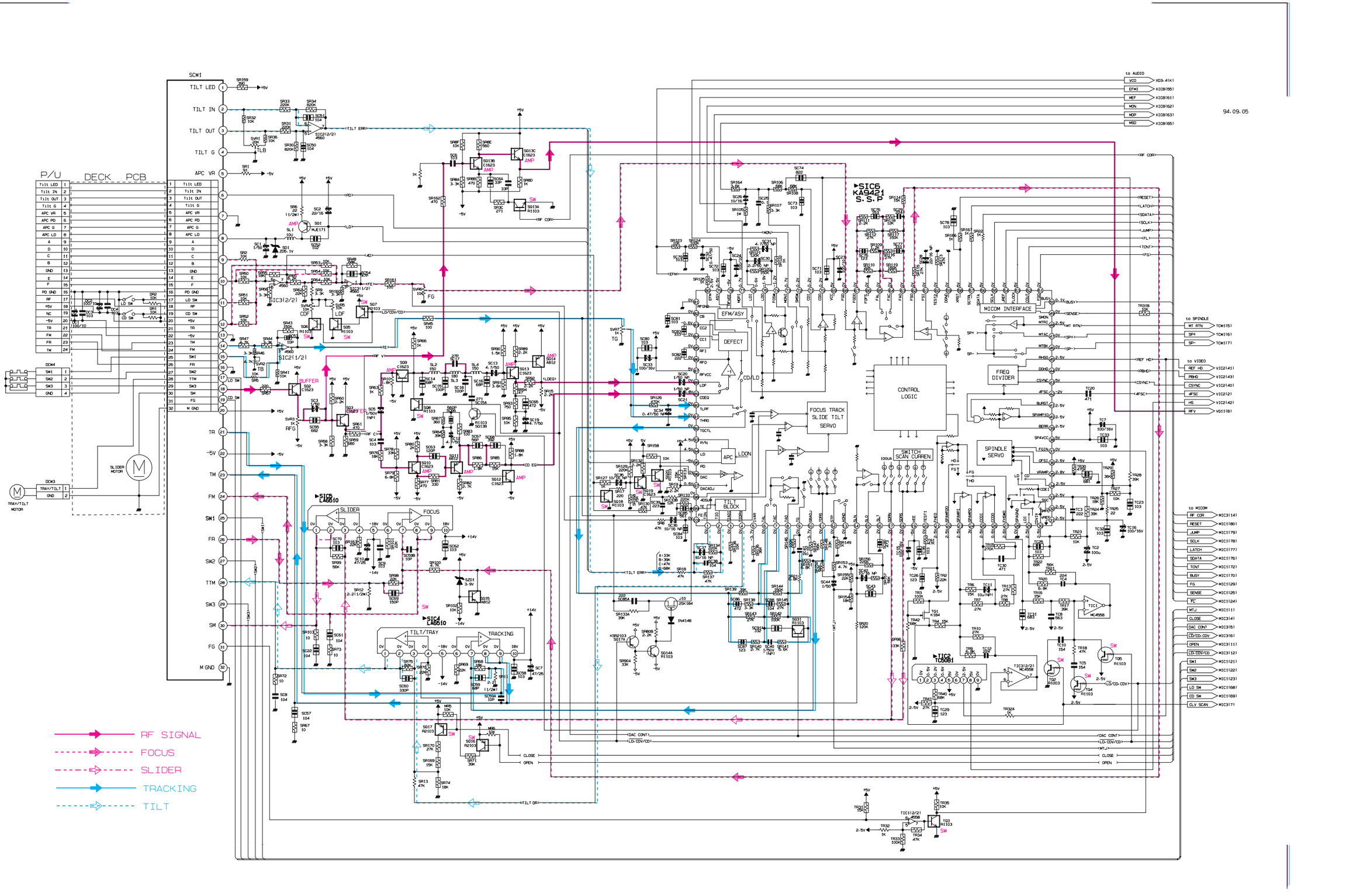


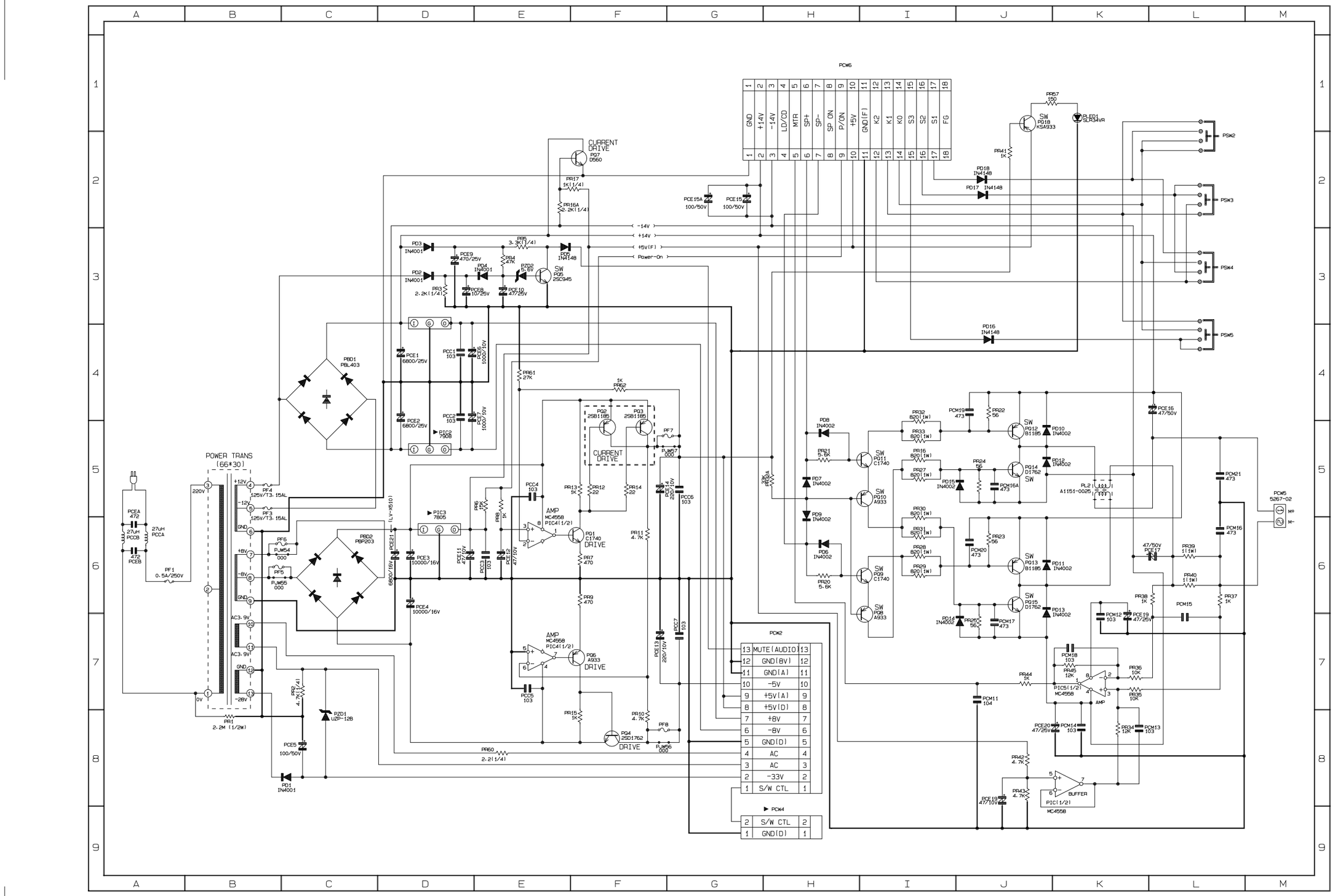
3. SCHEMATIC

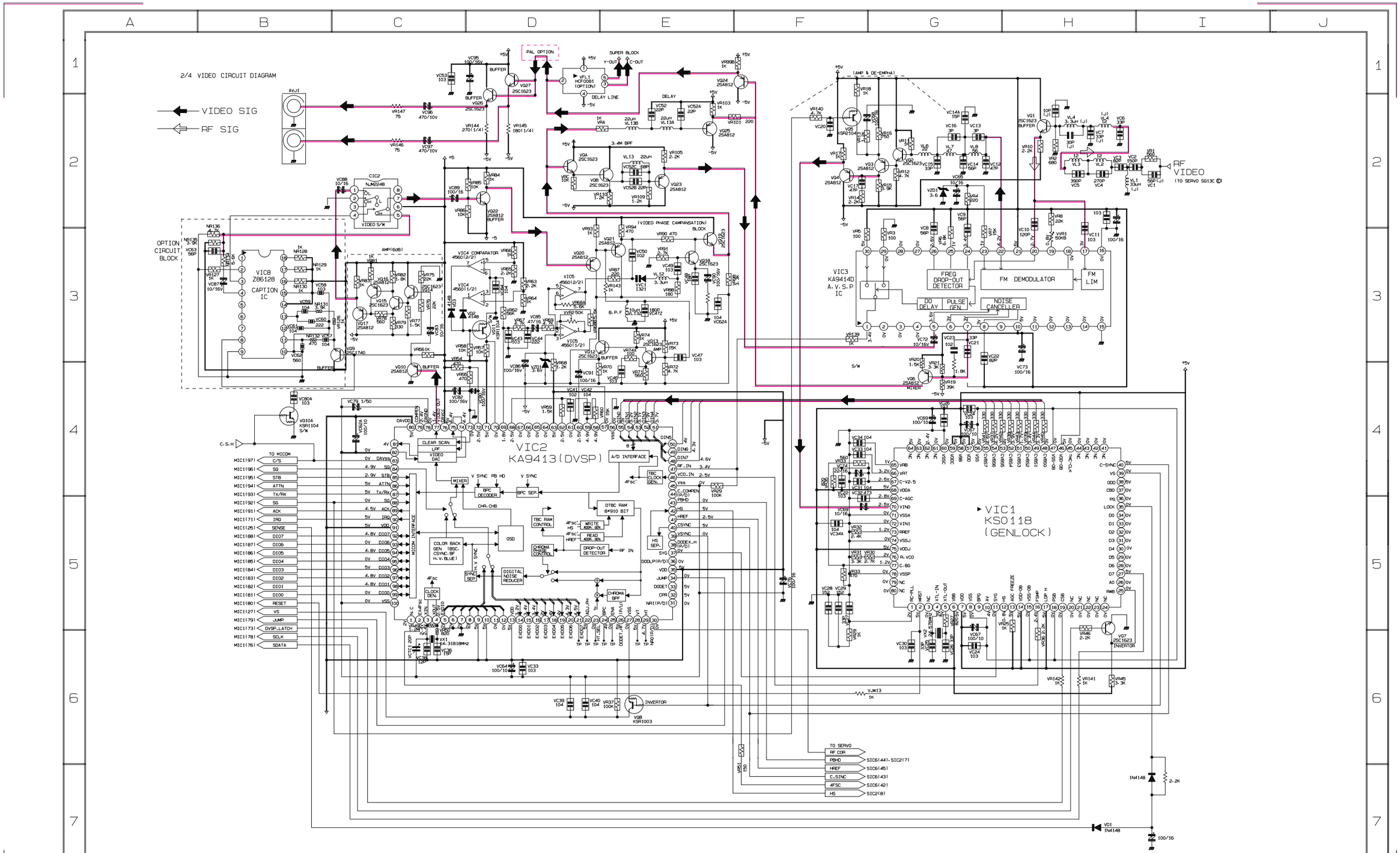
3-1 AUDIO




4/4 SYSCON SECTION
EXPANDER3
MIC3
TC4094
EXPANDER1
MIC2
TC4094
VFD : SVA-9BS05
MIC1
LC866232A
(MICOM)
TO AUDIO
CDGH
CDG RESET
ECHO LAT
SCLK
SDATA
DSP LAT
SQCK
SUBQ
CRCF
RESET
MUTE
SCOR
A
B
C
CD/CDROM
LOCK
1/L
2/R
A/D
CX ON
TO NT/PAL
CAPTION H
PAL/NTSC
CFL
TO VIDEO
DIO0
DIO1
DIO2
DIO3
DIO4
DIO5
DIO6
DIO7
IRQ
ACK
SG
Tx/Rx
ATTN
STB
SQ
RESET
JUMP
LATCH
SENSE
VD
SDATA
SCLK
to SERVO
RESET
LATCH
SDATA
SCLK
JUMP
FL
TCNT
FG
BUSY
SENSE
LD/CD.CDV
DAC
LD-CDV/CD
MTJ
CLOSE
OPEN
SW1
SW2
SW3
CD SW
LD SW
RF COR
CLV SCAN
to FRONT
S9
S8
K1
K2
to POWER
S16
S15
S14
K0
K1
K2
KEY OPTION
MULTI.INTRO
CAPTION
CD.DIRECT or NT/PAL
FLT BRIGHT
TO POWER
AC
AC
-33V
SW CON
TO SPINDLE
+5V(F)
POWER ON
SP ON
TO FRONT
LED1
SW CON
REMOCON EYE MM-009E
RESET SIGNAL OPERATOR
(OPTION) PAL
NTSC


94.09.05
P/U DECK PCB
SCW1
TILT LED
TILT IN
TILT OUT
TILT G
APC VR
APC PD
APC G
APC LD
A
D
C
B
GND
E
F
PD GND
RF
+5V
NC
-5V
TR
FW
FR
TM
LD SW
CD SW
SLIDER MOTOR
TRAY/TILT MOTOR
SW1
FR
SW2
TTM
SW3
SM
FG
M GND
SIC1(2/2)
SIC2(1/2)
SIC3(2/2)
SIC5 LA6510
SLIDER
FOCUS
TILT/TRACKING
TRACKING
BUFFER
CDF
LDF
TB
RFG
EFM/ASY
DEFECT
CD/LD
FOCUS TRACK SLIDE TILT SERVO
CONTROL LOGIC
SWITCH SCAN CURREN
SPINDLE SERVO
FREQ DIVIDER
MICOM INTERFACE
SIC6 KA9421 S.S.P
TIC2 TC9081
TIC1(2/2) MC4558
TIC3(2/2) MC4558
TIC1 MC4558
TILT BLOCK
APC
LDON
to AUDIO
VCO
EFMI
MDF
MDN
MDP
MSD
to SPINDLE
MT RTN
SPI
SP-
to VIDEO
REF HD
PBHD
CSYNC
4FSC
HS
RFV
to MICOM
RF COR
RESET
JUMP
SCLK
LATCH
SDATA
TCNT
BUSY
FG
SENSE
TE
MTJ
CLOSE
DAC CONT
CD/CD-CDV
OPEN
LD-CDV/CD
SW1
SW2
SW3
LD SW
CD SW
CLV SCAN
RF SIGNAL
FOCUS
SLIDER
TRACKING
TILT


PCW6
GND
+14V
-14V
LD/CD
MTR
SP+
SP-
SP ON
P/ON
+5V
GND(F)
K2
K1
K0
S3
S2
S1
FG
CURRENT DRIVE
PQ7 D560
PR17 1K(1/4)
PR16A 2.2K(1/4)
PCE15A 100/50V
PCE15 100/50V
-14V
+14V
+5V(F)
Power-On
PD3 IN4001
PD2 IN4001
PCE9 470/25V
PR4 47K
PD4 IN4001
PZD2 5.6V
SW PQ5 2SC945
PR3 2.2K(1/4)
PCE8 10/25V
PCE10 47/25V
PR5 3.3K(1/4)
PD5 IN4148
PR57 150
SW PQ18 KSA933
BLED1 SLR34VR
PR41 1K
PD18 IN4148
PD17 IN4148
PSW2
PSW3
PSW4
PSW5
PD16 IN4148
PBD1 PBL403
PCE1 6800/25V
PCC1 103
PCE7 1000/10V
PCC2 103
PCE2 6800/25V
PIC2 7908
PR61 27K
1K PR62
PQ2 2SB1185
PQ3 2SB1185
CURRENT DRIVE
PF7
PJW57 000
PCC4 103
PR13 1K
PR12 22
PR14 22
AMP MC4558 PIC4(1/2)
PQ1 C1740 DRIVE
PCE14 220/10V
PCC6 103
PR11 4.7K
PR7 470
PR8 470
PCE13 220/10V
PCC7 103
AMP MC4558 PIC4(1/2)
PQ6 A933 DRIVE
PCC5 103
PR15 1K
PR10 4.7K
PF8
PQ4 2SD1762 DRIVE
PJW56 000
PR60 2.2(1/4)
PCW2
MUTE(AUDIO)
GND(8V)
GND(A)
-5V
+5V(A)
+5V(D)
+8V
-8V
GND(D)
AC
AC
-33V
S/W CTL
PCW4
S/W CTL
GND(D)
POWER TRANS (66*30)
+12V
-12V
GND
+8V
-8V
GND
AC3.9V
AC3.9V
GND
-28V
220V
0V
PF4 125V/T3.15AL
PF3 125V/T3.15AL
PJW54 000
PF5 PJW55 000
PF1 0.5A/250V
PCEA 472
27uH PCCA
27uH PCCB
PCEB 472
PBD2 PBP203
PCE21 6800/16V
PCE3 10000/16V
PCE4 10000/16V
PCE11 470/16V
PCC3 103
PCE12 47/10V
PR2 4.7K(1/4)
PR1 2.2M (1/2W)
PCE5 100/50V
PD1 IN4001
PZD1 UZP-12B
PIC3 7805
PR6 1K
PR9 1K
PD8 IN4002
PR21 5.6K
PD7 IN4002
PD9 IN4002
PD6 IN4002
PR20 5.6K
PR59A 33K
PR59B 33K
SW PQ11 C1740
SW PQ10 A933
SW PQ9 C1740
SW PQ8 A933
PR32 820(1W)
PR33 820(1W)
PR16 820(1W)
PR27 820(1W)
PR30 820(1W)
PR31 820(1W)
PR28 820(1W)
PR29 820(1W)
PCM19 473
PR22 56
SW PQ12 B1185
PD10 IN4002
PD12 IN4002
PR24 56
SW PQ14 D1762
PD15 IN4002
PCM16A 473
PCM20 473
PR23 56
SW PQ13 B1185
PD11 IN4002
PD13 IN4002
PD14 IN4002
PR25 56
PCM17 473
PL2 A1151-0025
PCW5 5267-02
PCM21 473
PCM16 473
PCE16 47/50V
47/50V PCE17
PR39 1(1W)
PR40 1(1W)
PR38 1K
PR37 1K
PCM15
PCM12 103
PCE19 47/25V
PCM18 103
PR45 12K
PR36 10K
PR35 10K
PR44 1K
PIC5(1/2) MC4558
AMP
PCM11 104
PCE20 47/25V
PCM14 103
PR34 12K
PCM13 103
PR42 4.7K
PR43 4.7K
PCE18 47/10V
BUFFER PIC(1/2) MC4558


2/4 VIDEO CIRCUIT DIAGRAM
VIDEO SIG
RF SIG
VIC2
KA9413(DVSP)
VIC1
KS0118
(GENLOCK)
VIC3
KA9414D
A.V.S.P
IC
VIC8
Z86128
CAPTION
IC
OPTION
CIRCUIT
BLOCK
PAL OPTION
SUPER BLOCK
DELAY LINE
3.4M BPF
B.P.F
[VIDEO PHASE CAMPANSATION] BLOCK
[AMP & DE-EMPHA]
FREQ DROP-OUT DETECTOR
FM DEMODULATOR
FM LIM
DO DELAY
PULSE GEN
NOISE CANCELLER
RF VIDEO
(TO SERVO SQ13C)
TO MICOM
TO SERVO
CLEAR SCAN
LPF
VIDEO DAC
A/D INTERFACE
MICOM INTERFACE
MIXER
BPC DECODER
BPC SEP.
CHR. CHB
OSD
COLOR BACK GEN (BSC, CSYNC BP H.V. BLUE)
TBC RAM CONTROL
DTBC RAM 8Kbit BIT
WRITE ADDR. GEN.
READ ADDR. GEN.
CHROMA DOT CONTROL
DROP-OUT DETECTOR
RF IN
SYNC SEP.
DIGITAL NOISE REDUCER
CHROMA BPF
CLOCK GEN.
TBC CLOCK GEN.
H.V SYNC
V SYNC
PB HD
INVERTER
VG10A KSR1104 S/W
VG8 KSR1003
VG7 2SC1623 INVERTER
VD1 1N4148
1N4148 2.2K
100/16